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EXAMINER

COLAN, GIOVANNA B

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/752,432	Applicant(s) MAXHAM ET AL.	
	Examiner Giovanna Colan	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 14-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 29-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to the Amendment filed on 06/28/2006.
2. Claim 1 was amended. Claims 14 – 28 were canceled. No claims were added.
3. This action is made Final.
4. Claims 1 –13, and 29 – 34 are pending in this application.
5. Applicant's arguments filed on 06/28/2006 have been fully considered but they are not persuasive.

Drawings

6. This application has been filed with informal drawings (Figures 3-6, 8-10), which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 1-13, and 29-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "substantially equally" recited in claims 1, 29, and 34, is a relative term which renders the claims indefinite. It is unclear what is the level of similarity claims refer to.

Examiner asserts that all claims should be checked for clarification. Appropriate action is required.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 4-13, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows (U.S. Patent No. 5,745,900), in view of Burkowski ("Retrieval Performance of a Distributed Text Database Utilizing a Parallel Processor Document Server").

Regarding Claim 1, Burrows discloses a method ...comprising:

a) creating a fingerprint for each native document (col. 8, lines 16-23, "The FINGERPRINT 255 represents the entire content of the page. The fingerprint 255 can be produced by applying one-way polynomial functions to the digitized content. Typically, the fingerprint is expressed as an integer value. Fingerprinting techniques ensure that duplicate pages having identical content have identical fingerprints. With very high probabilities, pages containing different content will have different fingerprints.");

b) de-duplicating each native document in accordance with the fingerprint to produced a de-duplicated plurality of native documents (col. 1, lines 42-45, Therefore, it is desired to provide a technique which minimizes the likelihood that duplicate pages are indexed. The technique should also allow for reindexing as duplicate pages are deleted.”; col. 2, lines 41-42, “FIG. 24 shows a process for detecting duplicate pages; FIG. 25 is a flow diagram of a process for deleting pages;”; col. 5, lines 12-14, “The maintenance module 80 also effectively deals with duplicate Web pages containing substantially identical content.”);

c) extracting data from each native document; d) associating extracted data with a corresponding native document (col. 5, lines 33-38, “A page 200 can be defined as a data record including a collection of portions of information or “words” having a common database address, e.g., a URL. This means that a page can effectively be a data record of any size, from a single word, to many words, e.g., a large document, a data file, a book, a program, or a sequence of images.”; col. 11, line 66 – col. 12, line 7, “The samples are used to generate summary entries 925 in the second level summary data structure 72. Each summary entry 925 includes the word 926 associated with the sample, and the sampled location associated with the word. In addition, the summary entry 925 includes a pointer 928 of the next entry in the compressed data structure 71 following the sampled entry. The summary data structure 72 can also be mapped into fixed size blocks or disk files to fully populate the summary data structure 72.”, wherein the words are extracted from the native documents); and

However, Burrows is silent with respect to the step of distributing the de-duplicated plurality of native documents and extracted data substantially equally amongst a plurality of nodes of the document management computer system. On the other hand, Burkowski discloses a method comprising distributing documents and extracted data substantially equally amongst a plurality of nodes of the document management computer system (page 73, section "Uniform Distribution, "The database contents are distributed in a very straightforward fashion; document j and the contribution of this document to the index facility are both loaded into disk $j \pmod{N}$). Thus, each disk will contain $1/N$ of all the documents in the database and will also support the index (inverted lists [1], surrogate file [4], [5], [7] or subdivided surrogate files [3]) associated with that particular subset of the full document collection. In this case the server portion of the overall search functionality is divided across N basically independent subsystems"). It would have been obvious to one having ordinary skill in the art at the time the invention was made to adopt a method of distributing documents substantially equally amongst a plurality of nodes as disclosed by Burkowski to load the de-duplicated native documents and extracted data as disclosed in Burrows. To add, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Burkowski's teachings to the system Burrows. Skilled artisan would have been motivated to do so, as suggested by Burkowski (Page 78, paragraph: "Conclusion", Burkowski), to provide a very reasonable approach when establishing a text retrieval system on a set of parallel servers. Performance can approach linear speed up depending on the overheads involved in handling the index. The strategy of

splitting the retrieval functionality across the family of servers should be considered as a viable alternative which can offer performance advantages arising from both the reduction of synchronization delays and the provision of document servers dedicated to this service. In addition, both of the references (Burrows and Burkowski) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, databases management systems, indexing, and search engines. This close relation between both of the references highly suggests an expectation of success.

Regarding Claim 4, the combination of Burrows in view of Burkowski discloses a method wherein step (c) further comprises comparing the fingerprint of each native document with a plurality of fingerprints comprised of the fingerprints for each native document to be uploaded (col. 28, lines 40-47, Burrows).

Regarding Claim 5, the combination of Burrows in view of Burkowski discloses a method wherein step (c) further comprises comparing the fingerprint of each native document with at least one fingerprint corresponding to a native document stored in the document management computer system (col. 28, lines 40-47, Burrows).

Regarding Claim 6, the combination of Burrows in view of Burkowski discloses a method comprising discarding native documents that are determined to be the same in accordance with the comparison of fingerprints (Title; col. 1, lines 42-45; col. 8, lines 16-23).

Regarding Claim 7, the combination of Burrows in view of Burkowski discloses a method comprising discarding native documents that are determined to be the same in accordance with the comparison of fingerprints (Title; col. 1, lines 42-45; col. 8, lines 16-23, Burrows).

Regarding Claim 8, the combination of Burrows in view of Burkowski discloses a method wherein step (d) further comprises creating at least one data file corresponding to the extracted data for each native document (col. 11, line 66 – col. 12, line 7).

Regarding Claim 9, the combination of Burrows in view of Burkowski discloses a method wherein step (d) further comprises creating a plurality of data files corresponding to the extracted data for each native document (col. 11, line 66 – col. 12, line 7, Burrows).

Regarding Claim 10, the combination of Burrows in view of Burkowski discloses a method wherein the plurality of data files includes files selected from a group consisting of a text file, a meta data file, an XML file and a HTML file (col. 8, line 66 – col. 9, line 8, Burrows).

Regarding Claim 11, the combination of Burrows in view of Burkowski discloses a method wherein in step (e), a data table is created for at least one native document for defining an association with the plurality of data files (col. 14, lines 35-40, Burrows).

Regarding Claim 12, the combination of Burrows in view of Burkowski discloses a method wherein in step (e), a data table is created for at least one native document for defining an association with extracted data (col. 14, lines 35-40, Burrows).

Claim 13 is rejected on grounds corresponding to the reasons given above for claim 1.

Claim 29 is rejected for the reasons set forth hereinabove for claim 1 and furthermore the combination of Burrows in view of Burkowski discloses a system comprising a computer in communication with the plurality of computer nodes for receiving a plurality of input files to be uploaded to the plurality of computer nodes (Col. 2, lines 51-56, "FIG. 1 shows a distributed computer system 100 including a database to be indexed. The distributed system 100 includes client computers 110 connected to server computers (sites) 120 via a network 130. The network 130 can use Internet communications protocols (IP) to allow the clients 110 to communicate with the servers 120.", Burrows; and Page 73, section "Uniform Distribution, "The database contents are distributed in a very straightforward fashion; document j and the contribution of this document to the index facility are both loaded into disk $j \pmod{N}$. Thus, each disk will contain $1/N$ of all the documents in the database", Burkowski).

The subject matter of claims 30 and 33 is rejected in the analysis above in claim 1; and therefore these claims are rejected on that basis.

The subject matter of claims 31 and 32 is rejected in the analysis above in claims 8 and 10 respectively; and therefore these claims are rejected on that basis.

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows (U.S. Patent No. 5,745,900), in view of Burkowski ("Retrieval Performance of a Distributed Text Database Utilizing a Parallel Processor Document Server"), and further in view of Okabe et al., "Okabe " (U.S. Publication No. 2001/0025287).

Regarding Claim 2, the combination of Burrows in view of Burkowski discloses all the limitations as disclosed above. However, the combination of Burrows in view of Burkowski does not explicitly teach a method comprising the step of extracting native document(s) included in the plurality of documents from an archive file. On the other hand, Okabe teaches the step of extracting native document(s) included in the plurality of documents from an archive file (page 6, section [0077], Okabe). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a step of extracting native document(s) included in the plurality of documents from an archive file as disclosed by Okabe into the method of managing a plurality of native documents as disclosed in the combination of Burrows and Burkowski. The motivation obviously is to obtain documents from the archive through the extraction (page 6, section [0077]). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows (U.S. Patent No. 5,745,900), in view of Burkowski ("Retrieval Performance of a Distributed Text Database Utilizing a Parallel Processor Document Server"), and further in view of Zabetian (U.S. Publication No. 2001/0011350).

Regarding Claim 3, the combination of Burrows in view of Burkowski discloses all the limitations as disclosed above. However, the combination of Burrows in view of Burkowski does not explicitly teach a method wherein the fingerprint for each native document is created using a MD5 checksum. On the other hand, Zabetian teaches a method wherein the fingerprint for each native document is created using a MD5 checksum (page 4, section [0037], Zabetian). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a method wherein the fingerprint for each native document is created using a MD5 checksum as disclosed by Zabetian into the method of creating a fingerprint for each native document as disclosed in the combination of Burrows and Burkowski, where a tamper proof checksum algorithm is desired, MD5 with DES encryption can be used (MD5-DES) (page 4, section [0037], Zabetian). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

13. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burrows (U.S. Patent No. 5,745,900), in view of Burkowski ("Retrieval Performance of a Distributed Text Database Utilizing a Parallel Processor Document Server"), and further in view of Froessl (U.S. Patent No. 5,444,840).

Regarding Claim 34, the combination of Burrows in view of Burkowski discloses a system ...comprising:

a PC type computer a PC type computer connected in a parallel cluster (col. 2 and 15, lines 51-56 and 6-14; respectively, Burrows),

said computer using an operating system that stores electronic documents substantially equally in number through the cluster (page 73, section "Uniform Distribution, "The database contents are distributed in a very straightforward fashion; document j and the contribution of this document to the index facility are both loaded into disk $j \pmod N$. Thus, each disk will contain $1/N$ of all the documents in the database and will also support the index (inverted lists [1], surrogate file [4], [5], [7] or subdivided surrogate files [3]) associated with that particular subset of the full document collection. In this case the server portion of the overall search functionality is divided across N basically independent subsystems", Burkowski),

said operating system that generating a fingerprint for each document (col. 8, lines 16-23, "The FINGERPRINT 255 represents the entire content of the page. The fingerprint 255 can be produced by applying one-way polynomial functions to the digitized content. Typically, the fingerprint is expressed as an integer value. Fingerprinting techniques ensure that duplicate pages having identical content have identical fingerprints. With very high probabilities, pages containing different content will have different fingerprints.", Burrows);

where each document is identified by its file extension (col. 7, lines 58-65, "For example, the page 200 of FIG. 4 can have associated page attributes 250. Page

attributes 250 can include □ADDRESS□ 251, □DESCRIPTION□ 252, □SIZE□ 253, □DATE□ 254, □FINGERPRINT□ 255, □TYPE□ 256, and □END_PAGE□ 257, for example. The symbol "□," represents one or more characters which cannot be confused with the characters normally found in words, for example "space," "underscore," and "space" (sp_sp); col. 8, lines 24-25, "The TYPE attribute 256 may distinguish pages having different multimedia content or formatting characteristics"; Figure 4, element 256; It is well known to an ordinary skill in the art that each file has a file extension, which indicate the type of the file or document, Burrows);

and given a unique identification number (col. 26, lines 4-6, "Each entry 2201 includes an identification (page_id) 2210 of a qualified page", Burrows),

each of a plurality of documents having at least one of either meta-data, text or attachments that are indexed for web-based retrieval from the cluster (col. 8, line 66 – col. 9, line 8, "Attribute values or metawords can be generated for portions of a page. For example, the words of the field 230 may be the "title" of the page 200. In this case the "title" has a first word 231 and a last word 239. In "html" pages, the titles can be expressly noted. In other types of text, the title may be deduced from the relative placement of the words on the page, for example, first line centered. For titles, the parsing module 30 can generate a □BEGIN_TITLE□ pair and an □END_TITLE□ pair to be respectively associated with the locations of the first and last words of the title."; col. 3, line 31, "means for indexing the parsed pages"; col. 5, lines 26-27, "In the index 70 each word is stored as a "literal" or character based value"; col. 8, lines 44-46, "By inserting the . □END_PAGE□ attribute value in the index 70 as a metaword, searching

the index as described below can be more efficient"; col. 9, lines 43-46, "the indexing module 40 generates an index 70 of the content of the records or pages 200. The internal data structures 71-73 of the index 70 are now described first with reference to FIG. 6", Burrows);

said plurality of documents are de-duplicated in accordance with its fingerprint (col. 1, lines 42-45, Therefore, it is desired to provide a technique which minimizes the likelihood that duplicate pages are indexed. The technique should also allow for reindexing as duplicate pages are deleted."; col. 2, lines 41-42, "FIG. 24 shows a process for detecting duplicate pages; FIG. 25 is a flow diagram of a process for deleting pages;"; col. 5, lines 12-14, "The maintenance module 80 also effectively deals with duplicate Web pages containing substantially identical content.", Burrows);

said plurality of documents forming a cluster data base that is web-searchable by use of a predetermined descriptive term (col. 3, lines 28-33, "In order to identify pages of interest among the millions of pages which are available on the Web, a search engine 140 is provided. The search engine 140 includes means for parsing the pages, means for indexing the parsed pages, means for searching the index, and means for presenting information about the pages 200 located.", Burrows).

The combination of Burrows in view of Burkowski discloses all the limitations as disclosed above. However, the combination of Burrows in view of Burkowski is silent with respect to a system wherein each document is converted to ASCII text. On the other hand, Froessler teaches a system wherein each document is converted to ASCII text (Abstract, "In one embodiment, the image representation is converted into code

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(ASCII)"). It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate a system where each document is converted to ASCII text, as disclosed by Froessl, into the an electronic document management system as disclosed in the combination of Burrows of in view of Burkowski. Systems of this type allow full-text code searches to be conducted for words, which appear in the documents. An advantage of this type of system is that indexing is not absolutely required because the full text of each document can be searched, allowing a document dealing with a specific topic or naming a specific person to be located without having to be concerned with whether the topic or person was named in the index (col. 1 lines 41-49, Froessl). One of ordinary skill in the art would be motivated to make the aforementioned combination with reasonable expectation of success.

Response to Arguments

1. Applicant cannot show non-obviousness by attacking references individually where, as here, the rejections are based on a combination of references.

In re Keller, 208 USPQ 871 (CCPA 1981).

2. Applicant argues that; "one skilled artisan would have not been motivated to combine Burrows and Burkowski".

Examiner respectfully disagrees. The applied prior art does show that it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Burkowski's teachings to the system Burrows. Skilled artisan would have been motivated to do so, as suggested by Burkowski (Page 78, paragraph:"Conclusion", Burkowski), to provide a very reasonable approach when establishing a text retrieval system on a set of parallel servers. Performance can approach linear speed up depending on the overheads involved in handling the index. The strategy of splitting the retrieval functionality across the family of servers should be considered as a viable alternative which can offer performance advantages arising from both the reduction of synchronization delays and the provision of document serves dedicated to this service. In addition, both of the references (Burrows and Burkowski) teach features that are directed to analogous art and they are directed to the same field of endeavor, such as, databases management systems, indexing, and search engines.

This close relation between both of the references highly suggests an expectation of success.

3. Applicant argues that; "Burrows does not disclose the claimed step of distributing a plurality of de-duplicated and fingerprinted native documents and extracted data equally amongst a plurality of nodes of a computer".

Examiner respectfully disagrees. (See – response to argument No.1 in this office action above). The combination of Burrows in view of Burkowski does disclose distributing a plurality of de-duplicated and fingerprinted native documents and extracted data equally amongst a plurality of nodes of a computer (See - ***Claim Rejections - 35 USC § 103*** – rejection of Claim 1, No.5 a) and 5.b) discussed in this office action; and Page 73, section "**Uniform Distribution**, "The database contents are distributed in a very straightforward fashion; document j and the contribution of this document to the index facility are both loaded into disk $j(\text{mod } N)$. Thus, each disk will contain $1/N$ of all the documents in the database and will also support the index (inverted lists [1], surrogate file [4], [5], [7] or subdivided surrogate files [3]) associated with that particular subset of the full document collection. In this case the server portion of the overall search functionality is divided across N basically independent subsystems", Burkowski).

4. Applicant argues that the prior art fails to disclose; "that indexing and/or elimination of duplicate documents should be performed".

Examiner respectfully disagrees. The combination of Burrows in view of Burkowski does disclose indexing and elimination of duplicate documents should be performed (col. 1, lines 42-45, Therefore, it is desired to provide a technique which minimizes the likelihood that duplicate pages **are indexed**. The technique should also allow for reindexing as **duplicate pages are deleted**."; col. 2, lines 41-42, "FIG. 24 shows a process for detecting duplicate pages; FIG. 25 is a flow diagram of a process for deleting pages;"; col. 5, lines 12-14, "The maintenance module 80 also effectively deals with duplicate Web pages containing substantially identical content.", Burrows).

5. Applicant argues that; "Neither the additional cited Okabe nor Zabetian reference furnishes a motivation to combine Burrows and Burkowski to yield the invention of independent claim 1. Therefore, no Burrows/Burkowski/Okabe combination could render claim 2 obvious, and no Burrows/Burkowski/Zabetian combination, however made, could render claim 3 obvious".

Examiner respectfully disagrees. Applicant argument is invalid because neither Zabetian nor Okabe has been presented in order to reject claim 1. In addition, there is not need to use a motivation of neither Zabetian nor Okabe for claim 1 rejection; since such motivation for combination has been furnished by the applied reference Burkowski (See – 103 rejection of Claim 1 in this office action, and response to arguments No. 2 above).

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Prior Art Made Of Record

1. Burrows (U.S. Patent No. 5,745,900) discloses a method for indexing duplicate database records using a full-record fingerprint.
2. Burkowski ("Retrieval Performance of a Distributed Text Database Utilizing a Parallel Processor Document Server").
3. Okabe et al., "Okabe " (U.S. Publication No. 2001/0025287) disclose a document integrated management apparatus and method.
4. Zabetian (U.S. Publication No. 2001/0011350) discloses an apparatus and method for electronic document certification and verification.
5. Froessl (U.S. Patent No.5,444,840) discloses multiple image font processing.


Points Of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna Colan whose telephone number is (571) 272-2752. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Giovanna Colan
Examiner
Art Unit 2162
September 8, 2006


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